

Retrofits: Lessons Learned in the Field



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**Statewide Railyard Agreement
Technology Symposium
June 10, 2009**

AQMD Technology Demonstration Programs



- ⌘ Extensive experience with retrofit demonstration programs
- ⌘ Locomotive retrofit demonstration program similar to other demonstration programs
 - ☑ Off-road equipment Showcase Program
- ⌘ Technology transfer to locomotives

What Makes a Successful Demonstration Program?



⌘ Agreement on program objectives

- ☑ Multiple organizations

- ☑ Communication and coordination

⌘ Understand the challenges of demonstration programs

- ☑ Often involves complex design, fabrication, and installation issues

- ☑ Can involve multiple iterations

 - ☒ Design, testing, re-design, re-testing, etc., then field demonstration

What Makes a Successful Demonstration Program?



- ⌘ Commitment to work with prototype control equipment.
 - ☑ Involves downtime for design and installation of prototype equipment
 - ☑ Time to train and get feedback from operators
 - ☑ Downtime from unexpected breakdown of and modifications to prototype equipment

What Makes a Successful Demonstration Program?



- ⌘ Recognize and best account for the priorities of the organizations involved
- ⌘ Committed partners guarantee best chance of success
 - ☑ Essential that all involved are committed to meet the goal or goals of the demonstration program